## **Amendments to the Claims:**

This claim listing will replace all prior versions and listings of claims in the application:

## **Claim Listing:**

- 34. (Currently Amended) A method for inhibiting neoplastic cell proliferation in an animal comprising administering to an animal having at least one neoplastic cell present in its body a therapeutically effective amount of the agent of claim-1 an agent that inhibits one or more specific histone deacetylase isoforms, but less than all histone deacetylase isoforms.
- 35. (Currently Amended) A method for inhibiting neoplastic cell proliferation in an animal comprising administering to an animal having at least one neoplastic cell present in its body a therapeutically effective amount of the oligonucleotide of claim 3 an agent that inhibits one or more specific histone deacetylase isoforms, but less than all histone deacetylase isoforms, wherein the agent is an oligonucleotide complementary to a region of RNA or double-stranded DNA that encodes a portion of one or more histone deacetylase isoforms.
- 36. The method according to claim 35, wherein the animal is a human.
- 37. The method according to claim 35, further comprising administering to the animal a therapeutically effective amount of a histone deacetylase small molecule inhibitor with a pharmaceutically acceptable carrier for a therapeutically effective period of time.
- 44. (Canceled)
- 45. (Currently Amended) A method for modulating cell proliferation or differentiation of a cell comprising inhibiting a specific HDAC isoforms that is involved in cell proliferation

or differentiation by contacting the cell with an agent of claim 1 that inhibits one or more specific histone deacetylase isoforms, but less than all histone deacetylase isoforms.

- 46. The method according to claim 45, wherein the cell proliferation is neoplasia.
- 47. The method according to claim 46, wherein the histone deacetylase isoform is selected from the group consisting of HDAC-1, HDAC-2, HDAC-3, HDAC-4, HDAC-5, HDAC-6, HDAC-7 AND HDAC-8.
- 48. The method according to claim 47, wherein the histone deacetylase isoform is HDAC-1 and/or HDAC-4.
- 49. (New) The method according to claim 34, wherein the animal is a human.